TWO NEW CLIFF DWELLING SPECIES OF PINAROPAPPUS (ASTERACEAE, LACTUCEAE) FROM NORTHERN MEXICO

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ABSTRACT

Two new cliff dwelling species of *Pinaropappus* are described from México: P. pattersonii B. Turner from near La Trinidad, Nuevo León, and P. pooleanus B. Turner from Basaseachic Falls, Chihuahua. Both taxa are related to the cliff dwelling *Pinaropappus parvus* S.F. Blake, which is largely endemic to the White Mountains of southern New Mexico and the Guadalupe Mountains of closely adjacent Texas. The latter is readily distinguished from both of the new species by its reduced habit, the stems thick, woody and much branched from the base, forming low rosulate mats.

KEY WORDS: Pinaropappus, Asteraceae, Lactuceae, México

Preparation of a treatment of *Pinaropappus* for the Asteraceae of México (Turner & Nesom, in prep.) has occasioned the present paper.

Pinaropappus pattersonii B. Turner, sp. nov. TYPE: MEXICO. Nuevo León: Mpio. Montemorelos, 5 km SE of La Trinidad, in Canyon Cebolla near Ojo de Agua (25° 11′ N, 100° 08′ W), basswood-oak-hickory-walnut association, growing on limestone cliff, ca. 2000 m, Aug 1988, Thomas F. Patterson 6322 (HOLOTYPE: TEX!; Isotype: MEXU!).

Pinaropappo pooleano B. Turner similis sed plantis majoribus (15-20 cm altis vs. 3-6 cm) stolones aerios valde arcuatos efferentibus, foliis longioribus nonlobatisque, et pedunculis proxime infra capitula recurvatis differt.

Perennial acaulescent glabrous cliff dwelling herbs 15-20 cm high, arising from slender rhizomes. Lower shoots producing an array of slender, stoloniferous, arcuate, aerial stolons or offshoots which apparently root at the nodes.

Leaves of primary rosettes linear-oblanceolate, glabrous, mostly 10-12 cm long, 0.3-0.5 cm wide, weakly nervate, minutely white punctate, the margins entire, the apices acute to obtuse. Heads single on naked scapes 14-22 cm long, the upper portion of peduncle, just below the heads, arcuate to reflexed. Involucres turbinate, 9-10 mm high, the bracts 2-3 seriate, linear-lanceolate, glabrous, the apices obtuse to acute, usually purplish. Receptacles paleate, the pales linear-lanceolate, scarious. Florets ca. 15 per head, the corollas pale pink (dried), the ligules 6-8 mm long. Achenes (immature) ca. 4 mm long, glabrous, seemingly somewhat beaked for ca. 1.5 mm; pappus of ca. 40 tawny uniseriate very weakly barbellate bristles 4-5 mm long.

Pinaropappus pattersonii is obviously closely related to P. pooleanus but can be readily distinguished by its taller habit, larger, unlobed leaves, recurved heads, and lower, lateral stems which are markedly arcuate stoloniferous.

It is a pleasure to name this species for its only known collector, Mr. Thomas J. Patterson, graduate student in Botany, University of Texas, Austin, who has collected extensively in the area concerned.

Pinaropappus pooleanus B. Turner, sp. nov. TYPE: MEXICO. Chihuahua: Mpio. Ocampo, area of Cascada de Basaseachic at the confluence of Río Basaseachic and Río Durazno, ca. 1.2 km S of village of Basaseachic (28° 02′ N, 107° 55′ W), "abundant on wet cliff faces directly below falls with Erigeron basaseachensis; also in crevices at top of falls," ca. 1800 m, 27 Apr 1986, Guy Nesom 5444, with R. Spellenberg, R.D. Corral et al. (HOLOTYPE: TEX!; Isotypes: MEXU,US).

Pinaropappo pattersonii B. Turner similis sed plantis nanis absque stolonibus et pedunculis brevioribus (3-6 cm longis vs. 14-22 cm) non recurvatis infra capitula differt.

Dwarf acaulescent glabrous cliff dwelling herbs 2-10 cm high, arising from relatively slender rhizomes. Lower stems apparently not producing lateral aerial stolons. Leaves mostly 30-60 mm long, 1.5-7.5 mm wide, linear-oblanceolate, glabrous, the margins entire or with 2-5 deltoid lobes, the apices mostly acute. Heads single on naked scapes 2-10 cm high, the peduncles not recurved or reflexed apically. Involucres turbinate, 9-10 mm high, the bracts 2-3 seriate, linear-lanceolate, the apices mostly obtuse or rounded, rarely acute, usually rosy tinged. Receptacle paleate. Florets 10-15 per head, the ligules 8-10 mm long, white with purple midstripes beneath. Achenes (immature) ca. 2 mm long, glabrous, gradually tapered apically; pappus of ca. 40 tawny, uniseriate, weakly barbellate bristles 4-5 mm long.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Chihuahua: Mpio. Ocampo, Basaseachic Falls, just S of Basaseachic, ca. 0.3 km downstream from the bottom of the falls, pine-oak forest, rocky basaltic substrates, 16

May 1985, Lavin 5405 (TEX); in canyon along Río Basaseachic leading to the falls, crevices in rock at edge of cliffs at top of falls, ca. 1800 m, 1 Aug 1988, Spellenberg et al. 9606 (TEX).

This material was first recognized as distinctive by Ms. Jackie Poole through the several collections cited above, all of which she examined and provided an unpublished name for. Since she has long been a consummate scholar of the group, having worked with the genus in the field and in the herbarium, beginning when she was Curator of the Plant Resources Center collections (LL,TEX), I take much satisfaction in naming the taxon in her honor. She is currently working for the Texas Parks and Wildlife in Austin, Texas, in their program for the preservation of endangered plant taxa.

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